

7 a first mixer device configured to receive said LO signal and said first RF signal included
8 within a first band and responsively to output a first Intermediate Frequency (IF) signal;

C1
Cm
9 a second mixer device configured to receive said LO signal and said second RF signal
10 included within a second band and responsively to output a second IF signal;

11 a second two way switching device responsive to said base band controller for switching
12 between said first and second IF signals; and

13 wherein said local oscillator is configured to operate within a third band located between
14 said first and second bands and is responsive to said base band controller.

1 7.8. (Amended) A system comprising:

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Cm
2 a transmitter circuit; and

3 a dual band radio receiver coupled to said transmitter, said dual band radio receiver
4 including

5 a local oscillator configured to generate an LO signal,

6 a first two way switching device responsive to a base band controller for
7 switching between a first [Radio Frequency (RF) signal and a second RF signal, [received from]
8 the first two way switching device coupled to a first front end receiver and [a second RF signal
9 received from] a second front end receiver,

10 a first mixer device configured to receive said LO signal and [a] said first RF
11 signal included within a first band and responsively to output a first IF signal,

12 a second mixer device configured to receive said LO signal and [a] said second
13 RF signal included within a second band and responsively to output a second IF signal,

14 a second two way switching device responsive to said base band controller for
15 switching between said first and second IF signals, and

16 wherein said local oscillator is configured to operate within a third band
17 positioned between said first and second bands and responsive to said base band controller.

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21. (Amended) A method for providing a dual band radio receiver [, the method]
2 comprising [the steps]:
3 providing first and second front end receivers ;
4 providing first and second mixers, wherein the first mixer is coupled to the first front end
5 receiver and the second mixer is coupled to the second front end receiver;
6 providing a base band controller;
7 providing a circuit configured to determine whether an RF signal [input thereto from the
8 first or second front end receivers] belongs to one of a first and second bands, said circuit
9 coupling said RF signal to one of said first and second [mixers] front end receivers if said circuit
10 determines that the RF signal belongs to one of a first and second bands respectively and is
11 responsive to said base band controller; and
12 coupling a local oscillator to said first and second mixers, said local oscillator configured
13 to generate signals within a third band that is positioned approximately mid-way between said
14 first and second bands and wherein said local oscillator is responsive to said base band
15 controller.

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